



**VOLUNTARY REMEDIATION PROGRAM  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**PROJECT SUMMARY**

<b>Site Name:</b>	Universal Forest Products, Inc.
<b>Applicant's Name:</b>	Universal Forest Products, Inc.
<b>Site Location:</b>	50415 Herbert Street Granger St. Joseph County
<b>VRP Site Number:</b>	6940203
<b>Project Manager:</b>	Carla Gill
<b>Date Application Received:</b>	February, 1994
<b>Date Project Completed:</b>	April, 1999
<b>Project Duration:</b>	5 years, 2 months
<b>Contaminant Group(s):</b>	Metals (Hexavalent Chromium, Arsenic, Copper)
<b>Media Cleaned Up:</b>	Groundwater
<b>Cleanup Goals Achieved:</b>	Tier II Residential
<b>Deed/Land Use Restrictions:</b>	Not Applicable

**Project Description:** The facility was a wood treating plant since 1981. The groundwater beneath the facility became contaminated with hexavalent chromium as a result of spills and leaks of process solutions and the disposal of snow containing wood preserving chemicals onto unpaved areas.

The remedial approach used at the site consisted of the *in situ* fixation of hexavalent chromium in groundwater. The *in situ* fixation involved pumping groundwater from within the hexavalent chromium plume, adding a chemical reductant to the water, and injecting it back into the ground. As the reductant-amended water moved from the point of injection to the pumping wells, it diffused into the plume and reacted with the hexavalent chromium. The result was the reduction of hexavalent chromium to trivalent (nonhazardous), and the subsequent fixation and immobilization of the trivalent chromium onto aquifer solids.